

CLAIMS

Please amend the claims to the form indicated below:

1. (currently amended) ~~A method of making a laminated, high frequency magnetic material comprising the steps of:~~ The method of claim 18, wherein:
step (a) comprises (a) making first green tapes of a low hysteresis loss material, ~~(b) cutting the first green tapes to a given size, and~~ (c) making a small stack of at least one cut first green tapes,
step (b) comprises (d) making second green tapes of an insulating material, and (e) cutting the second green tapes to a predetermined size
steps (c) and (d) comprise (f) making a big stack by alternating layers of said small stack and the cut second green tapes, and
step (e) comprises (g) laminating the big stack under mechanical pressure, (h) burning off the binder by heating the big stack to 400 – 600°C for up to 2 hours, and (i) co-firing the big stack to obtain alternate layers of low hysteresis loss material and insulating material.
2. (original) The method of claim 1, where step i) comprises sintering at 1000 – 1400 °C.
3. (original) The method of claim 1, wherein step i) comprises sintering in a controlled atmosphere.
4. (original) A method of making a composite, high frequency magnetic material comprising the steps of
 - a) making magnetic plates with low hysteresis loss,
 - b) making thin insulating films,
 - c) depositing an adhesive on both sides of the insulating films,
 - d) making a stack by alternating layers of magnetic plates and insulating films, and
 - e) applying pressure and/or heat to the stack.

5. (original) The method of claim 4, wherein step (a) comprises making low hysteresis magnetic materials in blocks and making the said magnetic plates by machining.
6. (original) The method of claim 4, wherein step (a) comprises pressing a low hysteresis loss magnetic material in plate shapes and then firing the plate-shape material.
7. (original) The method of claim 4, including the step of forming the magnetic plates with substantially curved surfaces.
8. (currently amended) ~~A method of making a composite, high frequency magnetic material comprising the steps of:~~ The method of claim 18, wherein
 - ~~a) making magnetic plates with low hysteresis loss,~~
 - ~~b) steps (b), (c) and (d) comprise~~ depositing a small amount of an insulating material on at least one side of the magnetic plates, and
 - ~~c) stacking the magnetic plates, and~~
 - step (e) comprises ~~d) applying heat and pressure to melt or soften the insulating material, and e) cooling the stack to solidify the insulating material and to provide adhesion between adjacent said magnetic plates.~~
9. (currently amended) The method of claim 8, wherein ~~step (b) comprises~~ depositing the insulating material is deposited by a thick film process.
10. (currently amended) The method of claim 8, wherein ~~step (b) comprises~~ depositing the insulating material is deposited by a thin film deposition process.
11. (currently amended) The method of claim 8, wherein ~~step (b) comprises~~ the insulating material is deposited by dipping the magnetic plates in a molten or liquid insulating material.
- 12, 13, 14. (cancelled)

15. (currently amended) ~~A method of making a composite, high frequency magnetic material comprising:~~ The method of claim 18, including the step of inserting spacers between
- ~~a) making magnetic plates having low hysteresis loss,~~
 - ~~b) making a stack of the magnetic plates with spacers separating adjacent magnetic plates, and wherein steps, (b), (c), (d) and (e) comprise e)~~ melting an insulating material, ~~d) dipping the stack in the melted insulating material so that thin liquid layers of the insulating material are formed between the adjacent magnetic plates, and e) cooling the stack to solidify the thin liquid layers.~~
16. (currently amended) The method of claim 15 wherein ~~step (a) comprises~~ pressing a low hysteresis loss material is pressed into the plates prior to firing and then firing the plates.
17. (currently amended) The method of claim 15, wherein ~~step (a) comprises~~ machining ~~the~~ the magnetic plates are machined from a pre-fired block of low hysteresis loss material.
18. (new) A method of making a laminated, high frequency, low loss magnetic material, which can be operated at elevated flux density levels, comprising the steps of
- a. making thin magnetic plates with low hysteresis loss,
 - b. providing insulating material,
 - c. making a stack of a plurality of said plates,
 - d. inserting a thin film of insulating material between adjacent plates of said stack, and
 - e. applying heat and/or pressure to the stack to cohere the stack.
19. (new) The method of claim 18, wherein the magnetic material is a ferrite.
20. (new) The method of claim 6 wherein the said ferrite is a MnZn ferrite.
21. (new) The method of claim 6 wherein the said ferrite is a NiZn ferrite.